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Scaling Up in a Recession

Strategies for Optimizing Growth

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Summary

We are now nearly two months into a combined health and economic crisis. Many companies will have had a chance to address cash flow and strategic issues. Are you ready to examine your cash flow and strategic issues? Do you need a structured approach? Here is some guidance to help you make the right decisions about how to proceed.

For solution providers who are starting or scaling and require substantial venture capital investments to be able to grow, capital may be restricted for some time. During this crisis, venture capitalists are likely to invest in fewer firms, offering lower dollar amounts and for lower valuations. Startups and scaleups that rely on capital infusions will need to conserve cash. The question: How to do that? Here is one strategy to conserve cash:

1. Determine whether the markets for your products are the same or have changed and adjust plans accordingly.
2. If there are no opportunities in your current market, you will need to pivot.
3. If a pivot is not necessary, focus on the market segment with the best potential, instead of the entire market.
4. Use this time to concentrate your R&D efforts on improving product differentiation in those markets with the highest potential.

Whether you need to slow down the growth in spending or actually reduce headcount or cut back on marketing communications spending, a strategy of focusing on the highest potential market segments will conserve cash, optimize growth and produce a plan that will be supported by existing and prospective investors. This should be done with a view to focusing on value for customers to drive growth and how this translates to value for investors.

Where are we right now?

The world is just at the beginning of an economic contraction. While we can’t know now what will bring us out of this virus-fueled demand slump, we can learn from past recessions what is likely to happen and what firms should do to ensure their survival. This crisis has effects that will mirror what was experienced in the stock market crash of 2008.

- Demand for products and services, particularly in certain sectors, has declined rapidly.
- The lowered demand may reduce demand for more innovative items and durable goods as these purchases can more easily be delayed.
- Innovative products and services that lower prices may see increased potential.
- Cash flow for firms will decline, making firm viability more difficult unless external financing is available.

The first jolt of the stock market decline in 2007 was a reduction in the number of firms financed in 2008. Then the crash itself significantly reduced the number of firms getting capital. Not only were fewer firms obtaining capital, the investment rounds were smaller on average.

These smaller investments had a more dramatic effect on those firms getting their A rounds than it did on more mature firms. It is likely that valuations also declined, both due to the decline in the market and in the lower potential for firms as a result of the smaller levels of financing.

Reflecting the new normal

So, how do you handle this crisis? First, determine how much cash your company will need until it will be able to next raise funds. If your firm has not done this or needs to do it again with the benefit of a better understanding of the situation, there are principles to follow. Since raising funds can take nine months on average, then firms need to add a buffer to reflect the time needed to establish a new normal. For the sake of argument, say it will take six months until a quasi-normal life returns. That means your firm will need about 15 months of cash runway.

Your firm then needs to establish a cash flow forecast for the next 15 months. Expenses are simple to forecast; the trick is predicting a realistic forecast of revenue. Use information gleaned from the last month to determine new clients for the next six months, and then forecast the following nine months in the same way that the firm would have before the crisis. Then reduce those projections, and reduce them again. To forecast changes to the existing base of revenue, contact your clients and ask them what their intentions are. A sample of your clients will enable your firm to forecast revenue from its existing clients. Take the data, reduce those projections, and reduce them again.

Using those revenue forecasts and cash on hand, calculate what your revenue will likely be. The difference between expected revenue and current spending indicates the depth of cuts required. The big question is where to cut. With a starting point that makes realistic projections as to your company's runway, the next step is to focus on those market segments that have the greatest value to customers and investors. These are cash preservation issues, but more broadly they are optimization questions. Now, let's look at the strategic question of where you should focus remaining expenses to optimize performance in this crisis.

The Opportunity for Startups and Scaleups

Startups and scaleups: there is a difference. A startup is an idea in search of a business model. A scaleup is a firm that has proven that a successful model exists and is applying significant funding to accelerate growth. There are four dimensions of a business model that must be in place for any provider to be able to transition from a startup to a scaleup. These are:

- A large market
- Strong competitive differentiation
- Excellent product/market fit
- Good unit economics

Those who are able to prove that they have a firm foundation in each of these four dimensions have the capability to scale. Without a strong foundation in each of these four dimensions, a provider who spends cash to scale will prematurely scale and waste that cash. Startup Genome, in their 2011 report (Startup Genome Compass, Startup Genome, 2011), studied 3,200 companies and found that 70 per cent of companies that fail, did so because they scaled prematurely. Startup Genome's Key Findings regarding scaling up can be summarized as follows:

"Premature scaling is the most common reason for startups performance to worsen. They tend to lose the battle early by getting ahead of themselves and prematurely scaling their team, their customer acquisition strategies, or over-building their products . . . Startups need two to three times longer to validate their market than most founders expect. This underestimation creates the pressure to scale prematurely."

Because of rapid changes in demand for many products at this time, many business models that existed before this crisis no longer exist. Some may return, but others may not. What startups and scaleups don't know right now is how conditions have changed.

For those startups trying to figure out their business model, the activities recommended here are those that they are likely applying right now. However, any startup needs to review the validity of its assumptions and conserve cash by focussing on the highest potential markets.

For scaleups, the problem may be different, but the prescription is the same. Markets may have changed radically and scaleups need to review all elements of their business model and then optimize the capital used to drive growth by also focusing on the market segments with the highest potential.

All firms need to have a plan to weather the storm, and if they need capital, to be able to be strategic about what is being asked for and why. Companies also need to be able to communicate that plan and the reasons behind it to existing and potential investors. What follows is one potential plan to explore. This plan enables a provider to do three things:

- Focus growth on high potential market segments;
- Conserve cash by reducing or halting spending in other segments; and
- Provide a rationale to explain any plan to funders and optimize preservation/creation of value.

Make Sure the Market is Still Viable

An entrepreneur shouldn't start a business unless there is a large enough potential market to support continued business at scale, whatever that scale is. "Startups that haven't raised money overestimate their market size by 100 times and often misinterpret their market as new." (Startup Genome 2011) What both startups and scaleups need to do now is to check to see whether the market is still there or has been changed by the recession. One perspective for evaluating this type of change is contained in a companion piece entitled Should You Fish or Cut Bait which is available at this link: communitech.ca/techtalks/

There are three scenarios that need to be evaluated in order to make a decision regarding a firm's target market.

1. If research with existing and prospective clients indicates the market is still viable, then focus on the best potential market segment within that market in order to conserve cash, as raising money may take longer than is usually expected.

2. If the market has paused and clients are not currently buying but indicate that they will buy again when the economy is better, then focus on serving existing clients. In this way, you will be able to conserve cash until the market returns and then be able to raise more funding.
3. If the market has gone away forever, then it's time to pivot to a viable market, develop new differentiated products and experiment with unit economics. The combined health and economic crises are developing opportunities to develop entirely new businesses. For startups, there can be lots of optimism when the whole world is pivoting. This is a time to align strengths with emerging market needs. The last recession showed that seed stage financing may still be available for hot new opportunities.

Pivoting to a new market

Where a pivot is required, increasing focus on previously defined, durable market segments which have high affinity with a vendor's products will work for those companies where their products, services and market segments retain that ongoing character even amidst all the changes.

Even among some scaleups, the changes taking place in their markets and competitive environment are so fundamental that the company may need to revert to an earlier stage of company and product building. Even strong recent past market sectors may be permanently reformed by the present turmoil, or what once seemed important for customers may no longer be of interest or worthy of spending (and may stay in a quiescent state for some time to come). Some strategies for pivoting from Eric Ries in the Lean Startup include:

- Zooming in on previous features to create a new product;
- Zooming out by expanding product scope;
- Focusing on a new market segment;
- Addressing an unmet need;
- Changing between platform and application;
- Moving from mass to niche market;
- Changes to monetization;
- Adjust to more profitable growth;
- Changes to the distribution model; and
- Using different tech to achieve the same solution.

Focus on Growth

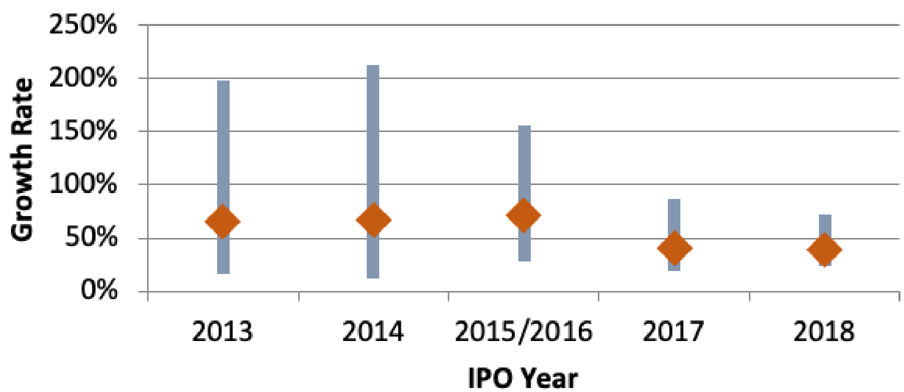
Wherever possible, you must continue to focus on growth. To create a world class public company, the most important thing is growth. Growth creates value in a technology company in two ways: first, higher growth rate results in higher revenue, which increases one dimension of the valuation formula; and second, the increased growth rate increases the revenue multiple, which is the other dimension in the formula:

Revenue x Revenue Multiple = Valuation

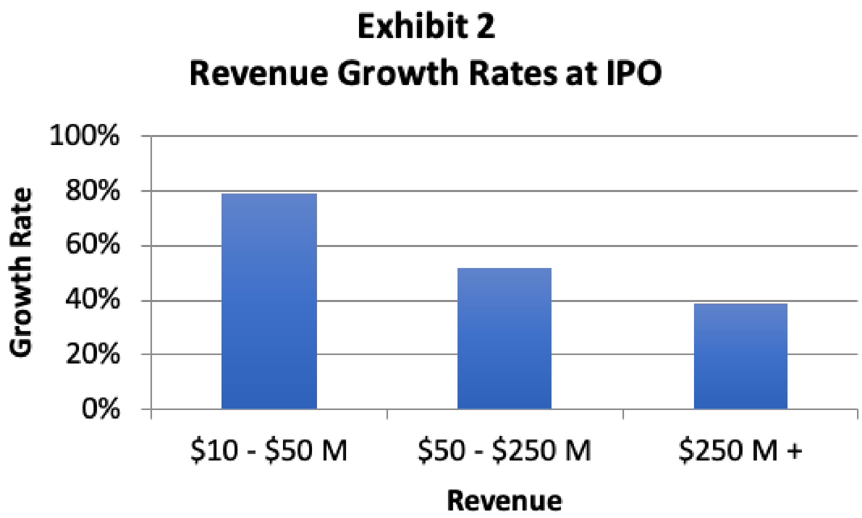
Growth rate increases revenue multiple

Growth rates of companies going public have changed over the last few years as companies have delayed their IPOs and greater returns were earned by venture capitalists. The low end of expected growth rates for IPOs has increased somewhat from 15 per cent to above 20 per cent, the top end of the range of expected growth rates has declined from approximately 200 per cent to about 75 per cent.

Exhibit 1
Pre-IPO Growth



The relationship between average growth rate and revenue is also further confirmed in Exhibit 2, showing a declining rate of growth as companies grow, from an average 39 per cent to 79 per cent for the smallest firms.



This data points to a need for growth rates of 80% with revenue under $50 million, decreasing to required growth rates of 40% when a company has revenue of $250 million.

Focus on the best potential market segment

In times of crisis, in order to continue to show strong growth rates, firms must focus on their best market segment. Many startups and scaleups develop their businesses by targeting an entire market not knowing which parts of that market will be best for achieving optimal levels of growth. Unfortunately, focussing on a large market instead of segments within that market only works when there is ample cash available. Focussing on the highest potential market segments will enable a firm to maximize its growth rate for the lowest potential cost. A startup may attempt to find its best market fit. A scaleup, on the other hand, may have to choose which market is a better focus in order to conserve cash. When you need to conserve cash, you should be focus on your best target market segment or user persona. In either case, there are a number of methodologies for arriving at a decision on which target market on which a firm should focus is the same.

While one way to choose a best market segment is to use each segment's Net Promoter Score, this method requires market research and obtaining this quickly may not be possible. Instead, one should look at unit economic benchmarks for firms of a similar size to determine where they stand and on what they should focus.

Using Unit Economics to pick the best market segment

Unit economics are the direct revenues and costs associated with a particular business model, expressed on a unit basis where the client is the unit. As it is likely that a provider's target market will have shifted slightly to focus on the most productive segment, the economics of selling to that market may have changed as well.

1. Figuring out which of a provider's client segments has the lowest mid-crisis churn rate is a good indicator of the segment with the greatest need.
2. A second metric is the mid-crisis Customer Acquisition Cost (CAC) Payback. Lower CAC paybacks indicate a higher client need and work to preserve cash flow.
3. The third metric is the ratio of Long Term Value (LTV) to CAC. Clients with a high LTV to CAC ratio are likely to see greater value in a solution. If CAC payback is low, then this will be a difficult market to address yet will result in the best long-term value and potentially the best growth rate post-crisis.

Commentators have determined that an LTV/CAC of greater than 3 is a level above which a firm is doing well and below which a firm is challenged. Other metrics include:

- Logo Retention – The percentage of clients maintained over time;
- Gross Dollar Retention – The dollars from those clients retained over time; and
- Net Dollar Retention – The total beginning revenue minus any revenue churn (caused by departing clients, or clients who have downgraded) plus any revenue expansion from upgrades, cross-sells or upsells, all divided by beginning revenue.

Surprisingly, there is not much of a difference between firms of different sizes. For all firms there was a correlation of 0.28 between net dollar retention and growth rate, a reasonable correlation. This means that improving net dollar retention can positively affect growth rates and improve a company's prospects of obtaining financing to scale.

At times when cash is scarce, firms need to examine unit economics for each market segment being served, perhaps ceasing to service market segments with lower unit economics. In any case, data would suggest that a cut-off of 100 per cent in net dollar retention is a good basis upon which to make a decision about marketing tactics to use and markets to serve.

In using unit economics for evaluating market niches, providers may need to revisit what analytics have greatest predictive value. Some providers will be fortunate and the indices that had greatest predictive value about future client and market behaviour will continue to hold. But many others will need to undertake a more basic rediscovery process of what data and analytics provide the best predictive value.

The following economic benchmarks can provide information to firms wanting to know where they stand in terms of results and help them determine where to focus.

Key Metrics – Under $1 Million Revenue

The following are key metrics for SaaS companies in the Validation Stage. These statistics also work for other types of companies as they can help companies understand the dynamics of growth. Companies at this stage are actively selling to their first customers, trying to get reference accounts and obtain some level of repeatable sales. In this phase, they have a useable product or service, are refining core features, and getting seed funding. The key result in the Validation Stage is that the company identifies an opportunity, where there is good product/market fit with good initial findings regarding the size of the market.

Validation Stage Metrics

Exhibit 3

	Growth Rate %	Subscription Revenue %	Gross Profit %	M&S as a % of R&D	Months to Recover CAC	Net Dollar Retention %	Net Burn Rate $K Monthly
Average	105.7	73.6	54.3	56.4	7.4	94.3	53.7
Median	78.0	90.0	60.0	70.0	5.0	99.0	25.0
Top Half	280.2	74.1	60.3	71.4	7.3	103.4	59.7
Bottom Half	21.1	73.1	48.2	43.0	7.5	84.3	47.6
Top Quartile	457.0	78.6	59.1	61.7	8.8	119.2	63.7
2nd Quartile	109.3	69.7	61.6	85.6	5.8	85.8	55.9
3rd Quartile	41.2	73.5	52.8	60.1	6.5	95.6	39.0
4th Quartile	1.7	72.7	43.7	31.4	8.6	68.7	56.0

Source: OpenView 2018 SaaS Survey

From this data it is easy to see the influence that low Net Dollar Retention has on growth rate.

Key Metrics – $1 - $5 Million Revenue

The following are key metrics for SaaS companies in in the Efficiency Stage. Many companies try to skip over the Efficiency Stage and end up scaling prematurely. It is very tempting—once a company has a few customers and some repeatable revenue—to pour on the gas and attempt to scale, but they are typically missing one vital ingredient: they haven't figured out their growth algorithm, the business model that will allow them to scale efficiently.

At the end of the Efficiency Stage, a company should have a well-articulated and properly tested plan to drive growth. It should be experiencing excellent growth and have the financial and employee resources to drive further growth in the Scaling Stage.

Efficiency Stage Metrics

Exhibit 4

	Growth Rate %	Subscription Revenue %	Gross Profit %	M&S as a % of R&D	Months to Recover CAC	Net Dollar Retention %	Net Burn Rate $K Monthly
Average	109.8	81.8	65.5	93.2	10.7	97.7	114.6
Median	73.0	90.0	74.5	91.3	9.0	100.0	50.0
Top Half	186.3	86.6	68.3	93.0	10.6	105.0	172.4
Bottom Half	32.0	76.9	62.6	94.2	10.8	89.8	55.9
Top Quartile	273.2	87.0	65.6	84.1	12.2	121.7	190.6
2nd Quartile	102.1	86.3	70.9	107.0	9.1	87.8	154.8
3rd Quartile	47.6	79.5	63.7	104.8	11.6	84.8	72.5
4th Quartile	16.4	74.2	61.5	81.4	10.0	95.2	39.2

Source: OpenView 2018 SaaS Survey

Key Metrics – Over $5 Million Revenue

The Scaling Stage is when entrepreneurs are supposed to drive growth most aggressively. If they've prepared properly, they will arrive at this stage with a well-tested algorithm to propel that growth. For the purposes of analysis, we've started this stage at an arbitrary figure of $5 million, but in reality, it may begin at a much lower amount . . . though it shouldn't start higher. Some firms may arrive at the $2 million or $3 million point with a well-tested algorithm and if that's the case, more power to them.

In any event, this is when firms solidify their corporate structure through departmentalization and add significant processes to drive growth. If a firm is successful, there is no end to the Scaling Stage. Facebook, for example, is still scaling rapidly. However, for most firms, when growth begins to tail off, they need to scale profit as a way of appealing to shareholders. In that case, they are entering the Sustain Stage.

Scaling Stage Metrics

Exhibit 5

	Growth Rate %	Subscription Revenue %	Gross Profit %	M&S as a % of R&D	Months to Recover CAC	Net Dollar Retention %	Net Burn Rate $K Monthly
Average	66.7	80.3	64.8	141.2	13.7	99.7	281.4
Median	44.0	90.5	74.0	133.3	12.0	96.0	147.5
Top Half	112.5	84.2	69.5	129.9	13.0	101.6	439.3
Bottom Half	21.5	76.4	60.2	161.5	14.3	98.0	123.6
Top Quartile	160.1	81.2	70.1	131.1	13.4	101.1	368.2
2nd Quartile	64.9	87.3	68.9	128.1	12.6	102.0	510.4
3rd Quartile	32.6	82.2	62.3	154.9	13.9	95.3	50.2
4th Quartile	10.2	70.5	58.0	168.9	14.7	100.9	200.9

Source: OpenView 2018 SaaS Survey

Focus R&D on enhancing Product Differential

The segment that a firm chooses to target should still be sufficient to support growth over the next few years until new capital is acquired or economics return to normal. What R&D needs to do is focus on competitive differentiation. Knowing the high potential segment to target, R&D needs to build product capability first in that area that most increases the ability of clients to differentiate your product from the competition. This might be by enhancing quality or speed on some dimension, or by reducing cost.

To do this, you need to be able to measure competitive differentiation on the same basis that clients will measure it. This is often a nebulous area but market research and asking clients how they rate a product or service to competitive ones on a number of different bases will enable you to develop a scoring system against which to target and track progress.

Dimensions of Product Differentiation

Exhibit 6

Quality	Speed	Cost
Performance	Transaction	Capital
Features	Delivery	Operating
Reliability	Implementation	Fixed
Conformance	Learning	Variable
Durability	Support and Service	
Service		
Design		
Vendor Experience		
Vendor Knowledge		

Amazon is a great example of a provider that has very well-defined points of competitive differentiation. In fact, unlike almost all companies out there, Amazon has figured out how to compete on all three dimensions of quality, speed and cost simultaneously. What is important about its basis of differentiation is the magnitude of difference which in most cases is greater than 50 per cent.

To be successful, you need to be able to quantify your competitive differential and establish objectives for the R&D team that will maximize that differential.

Conclusion

Providers are dealing first with their own survival, and then with maximizing their growth opportunity by aligning to the highest customer value. These tips will enable them to show the best results to any investors. Venture capitalists invest because of the:

- Team;
- Technology; and
- Market.

During this time of uncertainty, you might not be able to improve the team easily but you can improve all other aspects of your business by conserving cash while focussing on the highest potential market segment. Focus R&D on product differentiation for that segment and focus sales and marketing on improving LTV/CAC or net dollar retention for that segment. In this way you will have a plan to show VCs and your company will have results that set it farther on the path to being able to scale.

About Charles Plant

Charles Plant | Founder, The Narwhal Project

Charles Plant is a serial entrepreneur and innovation economist. As founder of The Narwhal Project, he is conducting research in order to understand what it takes to create a world class technology company. Aside from numerous research papers he has recently written a book that is available on Amazon entitled Triggers and Barriers: A Customer Perspective on Innovation.

Charles has been an officer, director or investor in over a dozen technology companies. He was co-founder and CEO for 15 years of Synamics, a telecommunications software firm that provided mass calling platforms to telcos. Active for much of his career in the world of finance, Charles has been a venture capitalist, investment banker, and corporate banker. He also worked for four years at MaRS Discovery District.

As an educator, Charles spent seven years on the faculty of York's Schulich School of Business teaching in the MBA program and has taught innovation and entrepreneurship at the University of Toronto. He has an MBA in marketing, is a Chartered Accountant and is currently pursuing a PhD in Economics.

About Communitech

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Communitech was founded in 1997 by a group of entrepreneurs committed to making Waterloo Region a global innovation leader. At the time it was crazy talk, but somehow this community managed to pull it off. Today, Communitech is a public-private innovation hub that supports a community of more than 1,400 companies—from startups to scale-ups to large global players.

Communitech helps tech companies start, grow and succeed in three distinct ways:

- Communitech is a place – the centre of gravity for entrepreneurs and innovators. A clubhouse for building cool shit and great companies.
- Communitech delivers programs – helping companies at all stages with access to capital, customers and talent. We are here to help them grow and innovate.
- Communitech partners in building a world-leading ecosystem – making sure we have all the ingredients (and the brand) to go from a small startup to a global giant.

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